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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/776,206      | 02/12/2004  | Tian-Fu Cao          | MR3287-11           | 4173             |

4586 7590 04/12/2005

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| EXAMINER |
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SAETHER, FLEMMING

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| ART UNIT | PAPER NUMBER |
|----------|--------------|

3677

DATE MAILED: 04/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                               |                              |  |
|------------------------------|-------------------------------|------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/776,206 | Applicant(s)<br>CAO, TIAN-FU |  |
|                              | Examiner<br>Flemming Saether  | Art Unit<br>3677             |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2005.
- 2a) ☒ This action is **FINAL**.      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 5-8 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claims 5 and 6, the inclined surface in combination with the groove is considered new matter. The embodiment of figure 6, which shows the inclined surfaces, does not include the groove. Also, it would be recognized that original claim 1 from which claim 5 depends did not include the groove limitation. It appears the groove and the inclined surfaces were originally disclosed as separate embodiments.

***Claim Rejections - 35 USC § 103***

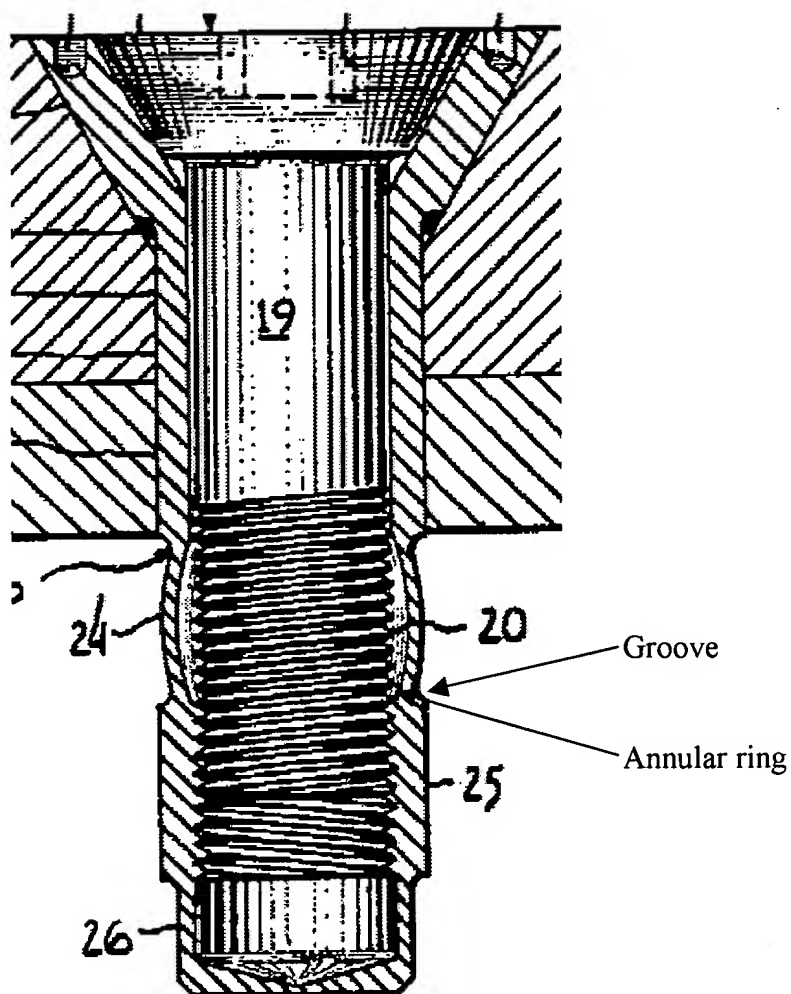
The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 3,136,203 to Davis in view of applicant's prior art as seen in Figs 1 and 2 (APA). Davis discloses a "bund nut" comprising a flange (21) at one end of a duct

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having first (24) and second (25) areas. The first area being closer to the flange and having a greater space then the second area such that an inclined annular ring and peripheral groove (see below) are formed at the same location between the first and second areas. The second area being threaded and a latch (16) is formed adjacent the first area.



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Davis does not disclose the ribs on the outer surface. The APA discloses ribs (15) on an outer surface of a first part. At the time the invention was made, it would have been obvious for one of ordinary skill in the art to provide the first area of Davis with ribs as disclosed in the APA in order to prevent rotation. The ribs would deform into the substrate to prevent rotation of the fastener.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davis in view of the APA as applied to claims 1 and 2 above, and further in view of Selle (US 6,095,738). Selle disclose a nut having an annular ring formed at 45°. At the time the invention was made, it would have been obvious for one of ordinary skill in the art to form the annular ring of modified Davis at 45° as disclosed in Selle in order to better receive the threaded bolt member. The 45° would direct the end of the bolt into proper engagement with threads.

### ***Response to Remarks***

Applicant's arguments have been considered but, as noted above, the prior art rejections have been maintained in addition to a new matter rejection necessitated by the amendment.

Applicant argues that Davis does not disclose a ring portion as indicated in the figure since what is indicated is simply the upper portion of the thread. In response, the examiner disagrees because the arrow in the figure is meant to point to an area

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adjacent the first thread but, that notwithstanding, even the surface of the first thread would read on the ring portion since that surface must extend to be larger than the periphery of the threaded surface for the device to be operable.

Applicant also finds distinction in that Davis discloses two grooves whereas the instant invention only includes one groove. In response, the examiner understands applicant's position but, the claims are not limited to only a single groove thus making the point moot. Along the same lines, the operation and manufacturing of the Davis device are irrelevant since it is simply the structure of Davis which is relied on. The claims do not limit the instant invention to particular mode of manufacture and/or use.

Applicant next argues that it would not have been obvious to combine the ribs of the APA with Davis. In response, the examiner disagrees because the skilled artisan would have recognized to provide Davis with ribs as disclosed in the APA in order to help prevent unwanted rotation of the device of Davis as the expandable sections comes in contact with the substrate.

Applicant's arguments regarding claims 5-8 are moot in view of the new grounds of rejection necessitated by the amendment.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

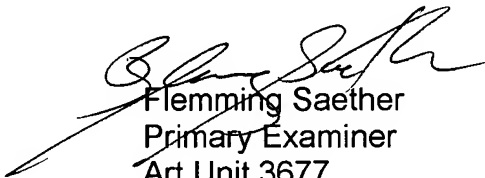
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Flemming Saether whose telephone number is 571-272-7071. The examiner can normally be reached on Monday through Friday.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Flemming Saether  
Primary Examiner  
Art Unit 3677